

REMARKS

Further and favorable consideration of the present application, in light of the above amendments and the following remarks, is respectfully requested.

The Examiner has maintained her rejection of Claims 30 and 31 under 35 U.S.C. § 112, second paragraph, maintaining that it is "unclear what primer of 10-50 nucleotides Applicant is claiming, since certain primers encompassed by Claims 30 and 31 would hybridize equally well with Lelystad virus, e.g." This rejection, to the extent it applies to the claims, as amended, is respectfully traversed.

By the present Amendment, Claim 30 has been amended to add a Markush group of the particular Iowa strain viruses disclosed in the application, namely ISU-22 (VR 2385 or VR 2386), ISU-22 (VR 2429), ISU-55 (VR 2430), ISU-3927 (VR 2431), ISU-79 (VR 2474) and ISU-1894 (VR 2475). Also, in order to more clearly define the claimed invention, Claim 30 has been amended to recite that the primer is chosen so as to hybridize under the stated conditions to the Iowa strain viruses, but not to Lelystad virus. Support for this Amendment can be found at least at page 28, lines 16-21 (for information regarding the deposited Lelystad strain), page 29, line 21 - page 30, line 3 ("the present invention is concerned with a vaccine which protects pigs from North American strains of PRRSV...[and] in developing vaccines and methods of protecting pigs against any and/or all strains of porcine reproductive and respiratory syndrome"); page 40, line 15 - page 41, line 1 (for information regarding the deposited Iowa strains); page 41, lines 8-16 ("primers for making relatively large amounts of DNA by the polymerase chain reaction...can be designed on the basis of sequence information where more than one sequence obtained from

a PRRSV genome has been determined (e.g., ORF's 2-5 of VR 2385 and Lelystad virus, or ORF's 6-7 of VR 2385, VR 2429, VR 2430, IU-79, ISU-1894, VR 2431 and Lelystad virus)") Thus, Claim 30 is now specifically directed to kits which distinguish the European isolate from the U.S. isolates. In addition, new Claims 39 and 40 have been added, which are directed to primers chosen so as to hybridize under the stated conditions to the Iowa strain viruses, and also to Lelystad virus, e.g., to detect both U.S. and European isolates. Such primers could be easily identified given the sequence comparisons of Figures 8-11, 17 and 21. In light of the foregoing, withdrawal of this rejection is respectfully requested.

The Examiner also maintained the rejection of Claims 30 and 31 under 35 U.S.C. § 103(a) over Wensvoort et al. Applicants submit that the amendments discussed above should obviate this rejection, because the claimed primers can only be identified by comparing the sequences of the Lelystad virus to those of the Iowa strains. Thus, because Wensvoort et al. does not provide any information regarding the sequences of the Iowa strains, one of ordinary skill in the art reading Wensvoort et al. would not have the necessary information with which to make primers which either (1) hybridize to both Lelystad and Iowa strain viruses; or (2) hybridize only to Iowa strain viruses, and not to Lelystad virus. In light of the foregoing, withdrawal of this rejection is respectfully requested.

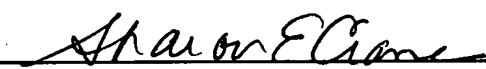
Applicants submit that the present application is in condition for allowance. Early notification of the same is respectfully requested.

In the event that there are any questions relating to this Amendment, or the application in general, it would be appreciated if the Examiner would telephone the

undersigned attorney concerning such questions so that prosecution of this application may be expedited.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: 
Sharon E. Crane, Ph.D.
Registration No. 36,113

P.O. Box 1404
Alexandria, Virginia 22313-1404
703-836-6620

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Mark-up of Claims

30. (Amended) A diagnostic kit for assaying a porcine reproductive and respiratory syndrome virus, comprising:

(a) a first primer comprising a polynucleotide having a sequence of from 10 to 50 nucleotides in length which hybridizes to a genomic polynucleic acid from an Iowa strain of porcine reproductive and respiratory syndrome virus selected from the group consisting of ISU-22 (VR 2385 or VR 2386), ISU-22 (VR 2429), ISU-55 (VR 2430), ISU-3927 (VR 2431), ISU-79 (VR 2474) and ISU-1894 (VR 2475), but does not hybridize to polynucleic acid from Lelystad virus at a temperature of from 25 to 75°C,

(b) a second primer comprising a polynucleotide having a sequence of from 10 to 50 nucleotides in length[, said sequence of said second primer being found in] which hybridizes to said genomic polynucleic acid from said Iowa strain of porcine reproductive and respiratory syndrome virus, but does not hybridize to polynucleic acid from Lelystad virus at a temperature of from 25 to 75°C and being downstream from the sequence to which said first primer hybridizes, and

(c) a reagent which enables detection of an amplified polynucleic acid.